

Technical Literacy Rubric

2015 Draft: In response to Technical Literacy Survey

Student Learning Goal: Technical Literacy: Students will utilize computer and emerging technologies effectively.

<i>Performance Criterion 1: Student demonstrates proficiency in the use of computers, other electronic devices and applications.</i>						
Highest Level of Competency		Intermediate Level of Competency		Lowest Level of Competency		
Selects and uses appropriate applications effectively and productively.		Selects and uses appropriate applications effectively and productively most of the time.		May require assistance to select appropriate applications.		
Is skilled in basic productivity tools such as word processing, spreadsheet, database, electronic research, e-mail, and applications for presentations and graphics.		Proficient in basic productivity tools such as word processing, spreadsheet, database, electronic research, e-mail, and applications for presentations and graphics.		Uses applications effectively and productively some of the time.		
Proficient in basic productivity tools may be uneven or require support.						
5	4	3	2	1	0	n/a

<i>Performance Criterion 2: Student demonstrates conceptual understanding of technology systems and operations</i>						
Highest Level of Competency		Intermediate Level of Competency		Lowest Level of Competency		
Demonstrates sophisticated understanding of the nature and operation of technology systems.		Demonstrates understanding of the nature and operation of technology systems.		Demonstrates limited understanding of the nature and operation of technology systems.		
Shows mastery of concepts underlying hardware, software, and connectivity.		Grasps concepts underlying hardware, software, and connectivity.		Shows limited comprehension of concepts underlying hardware, software, and connectivity.		
Consistently troubleshoots systems and applications well enough to maintain productivity.		Sometimes troubleshoots systems and applications well enough to maintain productivity.		Seldom attempts to troubleshoot systems and applications, or attempts to do so are unsuccessful.		
Transfers current knowledge to learning of new technologies, usually independently.		Attempts to transfer current knowledge to learning of new technologies, sometimes successfully; may require some assistance to do so.		Seldom attempts to transfer current knowledge to learning of new technologies or requires significant support to do so.		
5	4	3	2	1	0	n/a

<i>Performance Criterion 3: Student uses digital media and environments to communicate effectively.</i>						
Highest Level of Competency		Intermediate Level of Competency		Lowest Level of Competency		
<p>Communicates information and ideas effectively to multiple audiences using a variety of media and formats.</p> <p>Interacts, collaborates, and generates work products with peers or others employing a variety of digital environments and media.</p> <p>Engages with those of other backgrounds and adapts digital communication appropriately for successful interaction.</p>		<p>Communicates information and ideas effectively for the most part; may require assistance or be less successful to adapt to multiple audiences, media or formats.</p> <p>Often interacts, collaborates, and generates work products with peers or others; may not always choose the most appropriate digital environments and media, or may require assistance to do so.</p> <p>Earnest attempts to engage with those of other backgrounds are generally successful; sometimes adapts digital communication appropriately for successful interaction.</p>		<p>Communicates information and ideas effectively some of the time; seldom adapts digital communication to multiple audiences, media or formats or requires significant support to do so.</p> <p>Sometimes interacts, collaborates, and generates work products with peers or others; may require direction about which digital environments and media to use, or may lack the skill to use multiple ones.</p> <p>May lack awareness of other backgrounds in digital communication; may not adapt digital communication successfully as a rule.</p>		
5	4	3	2	1	0	n/a

<i>Performance Criterion 4: Student uses digital media and environments to acquire knowledge or skill.</i>						
Highest Level of Competency		Intermediate Level of Competency		Lowest Level of Competency		
<p>Successfully applies digital tools to gather, evaluate, and use information almost all the time.</p> <p>Application may include:</p> <ul style="list-style-type: none"> • Planning strategies to guide inquiry • Locating, organizing, analyzing, evaluating, synthesizing, and ethically using information from a variety of sources and media • Evaluating and selecting information sources and digital tools based on the appropriateness to specific tasks • Processing data and reporting results 		<p>Applies digital tools to gather, evaluate, and use information most of the time; application may be uneven or require support.</p> <p>Application may include:</p> <ul style="list-style-type: none"> • Planning strategies to guide inquiry • Locating, organizing, analyzing, evaluating, synthesizing, and ethically using information from a variety of sources and media • Evaluating and selecting information sources and digital tools based on the appropriateness to specific tasks • Processing data and reporting results 		<p>Attempts to apply digital tools to gather, evaluate, and use information; these attempts are sometimes successful; may require significant assistance.</p> <p>Application may include:</p> <ul style="list-style-type: none"> • Planning strategies to guide inquiry • Locating, organizing, analyzing, evaluating, synthesizing, and ethically using information from a variety of sources and media • Evaluating and selecting information sources and digital tools based on the appropriateness to specific tasks • Processing data and reporting results 		
5	4	3	2	1	0	n/a

<i>Performance Criterion 5: Student uses digital tools to demonstrate learning or create original work.</i>						
Highest Level of Competency		Intermediate Level of Competency		Lowest Level of Competency		
<p>Applies existing knowledge to generate new ideas, products, or processes; applications are usually successful.</p> <p>Creates original works as a means of personal or group expression.</p> <p>Uses critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.</p>		<p>Sometimes applies existing knowledge to generate new ideas, products, or processes; applications are sometimes successful.</p> <p>Attempts to create original works as a means of personal or group expression; may not always succeed, or may require support to do so.</p> <p>Often uses critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources; results may be uneven or inconsistently successful.</p>		<p>Seldom applies existing knowledge to generate new ideas, products, or processes; success may require significant assistance.</p> <p>Creates original works as a means of personal or group expression; results of these efforts are often problematic (e.g., unoriginal, unsuccessful).</p> <p>May attempt to use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources; may succeed in only some areas, or result may depend on support.</p>		
5	4	3	2	1	0	n/a

<i>Performance Criterion 6: Students practice safe, legal and ethical behavior related to technology.</i>					
Highest Level of Competency		Intermediate Level of Competency		Lowest Level of Competency	
Exhibits a positive attitude toward using technology.		Exhibits a neutral or occasionally positive attitude toward using technology.		May exhibit fearful or negative attitude toward using technology.	
Understands methods for safe Internet practices, including how to protect their personal information on the Internet.		Understands methods for safe Internet practices; protects their personal information on the Internet most of the time, with only occasional lapses		May not know how to interact safely or protect their personal information on the Internet.	
Actively manages the personal image that they convey through the information they post on the Internet.		Demonstrates an awareness of the personal image that they convey through the information they post on the Internet.		May convey an unflattering or unprofessional image online.	
Shows deep understanding of federal and state laws regarding computer wrongdoing.		Understands federal and state laws regarding computer wrongdoing.		Does not understand legal aspects of computer use.	
Exhibits leadership or sets a good example of ethical, engaged digital citizenship.		Sometimes exhibits "digital leadership;" more often follows good examples.		Is not a "digital leader;" may successfully follow good examples.	
5	4	3	2	1	0
					n/a

Standards consulted:

Massachusetts Technology Literacy Standards (<http://www.doe.mass.edu/odl/student.html>)

International Society for Technology in Education (<http://www.iste.org/standards/iste-standards/standards-for-students>)